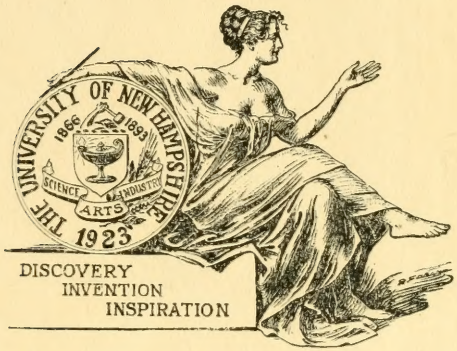
SHOUT
SHARE
IT

Bulletins. 179-208 OK - RBS. 4/10/42.

#192 - 30th Ann. Rpt. 1918
#198 - 31/32 Ann. Rpts 1919/1920
#203 - 33d Ann. Rpt 1921
#208 - 34th Ann. Rpt. 1922

} OK - RBS 4/10/42

SAPIENTIA UNIVERSALIS EX LIBRIS
UNIVERSITY OF NEW HAMPSHIRE



EXPERIMENT STATION LIBRARY

CLASS ~~639.73~~
NUMBER ~~N53 179-208~~
ACCESSION 4798 ~~c.3~~

Bulletin 189 **August, 1918**

NEW HAMPSHIRE
AGRICULTURAL EXPERIMENT STATION
DEPARTMENT OF CHEMISTRY

Analysis of Fertilizers

FOR 1918

MADE FOR THE
STATE DEPARTMENT OF AGRICULTURE

BY B. E. CURRY AND T. O. SMITH

NEW HAMPSHIRE COLLEGE
OF
AGRICULTURE AND THE MECHANIC ARTS
DURHAM, N. H.

On page 8, Lowell Acid Phosphate, top line, should read: Phosphoric Acid—Available found, 16.49; guaranteed, 16.00; insoluble, .37; total found, 16.86; total guaranteed, 17.00.

THE FERTILIZER INSPECTION FOR 1918.

The samples of fertilizer for the 1918 inspection were collected by Mr. Wilbur White for the Commissioner of Agriculture, Andrew L. Felker. One hundred forty-seven samples were received by the Agricultural Experiment Station for analysis.

The analytical work in this report has been secured with the assistance of E. N. Sanders, P. B. Place, J. Bloomfield, C. L. Lane, and W. L. Owen.

Copies of this report will be sent free upon request to the Commissioner of Agriculture, Concord, N. H., or to the Director of the Experiment Station, Durham, N. H.

Composition of Commercial Fertilizers Sampled and Analyzed in 1918.

MANUFACTURER AND BRAND.	NITROGEN.				PHOSPHORIC ACID.					POTASH.	
			Total.		Available.			Total.			
	Inorganic.	Organic.	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.	Found.	Guaranteed.	Found.	Guaranteed.
AMERICAN AGRICULTURAL CHEMICAL COMPANY, New York, N. Y.											
Ammoniated A Fertilizer	.90	.74	1.64	.82	13.20	10.00	1.80	15.00	11.00	....	....
Ammoniated Fertilizer A	.55	.53	1.08	.82	9.20	9.00	1.90	11.10	11.00	....	....
Ammoniated AA Fertilizer	.87	.77	1.64	1.65	10.00	10.00	1.60	11.60	11.00	....	....
Ammonited Fertilizer AAA	1.53	1.03	2.56	2.47	10.40	10.00	2.70	13.10	11.00	....	....
Ammoniated Fertilizer AAAA	2.49	.75	3.24	3.28	10.10	10.00	1.60	11.70	11.00	....	....
Cereal & Root Fertilizer	1.85	.66	2.51	2.47	10.10	10.00	1.70	11.80	11.00	....	....
16% Plain Super-phosphate	....	....	....	....	16.30	16.00	2.10	18.40	17.00	....	....
Packer's Union Universal Fertilizer	.62	.25	.87	.82	7.80	8.00	1.10	8.90	9.00	1.16	1.00
Packer's Union Gardener's Complete Manure, 1916	1.68	.73	2.41	2.47	9.70	9.00	1.20	10.90	10.00	1.54	1 00
Pulverized Sheep Manure	.53	1.53	2.06	2.05	1.10	.....	.70	1.80	1.25	1.60	1 00
Bradley's 1916 Corn Phosphate	1.26	.54	1.80	1.65	10.70	10.00	1.90	12.60	11.00	2.10	1.00
Bradley's Fine Ground Bone	....	....	2.38	2.47	.....	.....	....	25.30	22.88	....	....
Bradley's Grain Fertilizer	.49	.30	.79	.82	10.10	10.00	1.50	11.60	11.00	....	....
Bradley's Maine Potato Special	3.08	1.00	4.08	4.11	9.60	9.00	2.30	11.90	11.00	....	....
Bradley's 1916 Potato Fertilizer	1.44	.70	2.14	2.06	8.00	8.00	1.40	9.40	9.00	1.24	1.00
Bradley's Root Crop Manure	2.44	.85	3.29	3.29	10.20	10.00	2.00	12.20	11.00	....	....
Bradley's Special Corn Phosphate without Potash	.90	.80	1.70	1.65	10.00	10.00	2.10	12.10	11.00	....	....
Bradley's Special Eclipse Fertilizer	.56	.31	.87	.82	8.00	8.00	1.20	9.20	9.00	1.12	1.00
Bradley's Special Potato Fertilizer without Potash	.84	.76	1.60	1.65	10.10	10.00	2.00	12.10	11.00	....	....
Bradley's Special Potato Manure without Potash	1.09	1.57	2.66	2.47	10.40	10.00	2.00	12.40	11.00	....	....
Bradley's X4 Super Phosphate of Lime	2.16	.87	3.03	2.47	9.20	9.00	2.00	11.20	11.00	1.42	1.00
Bradley's X4 Without Potash	1.58	1.07	2.65	2.47	9.80	10.00	2.50	12.30	11.00	....	....
Bradley's X4 Super Phosphate without Potash	1.91	.51	2.42	2.47	10.40	10.00	1.70	12.10	11.00	....	....
Odorless 5-10-0, Grass and Lawn Top Dressing without Potash	3.01	1.39	4.40	4.11	10.40	10.00	2.00	12.40	11.00	....	....

Cleveland's 1916 General Crop Fertilizer	.76	.70	1.46	.82	9.70	8.00	1.60	11.30	9.00	1.42	1.00
Cleveland's 1916 General Crop Grower	1.19	.56	1.75	1.65	10.70	9.00	1.70	12.40	10.00	1.26	1.00
Great Eastern Northern Corn Special, 1916	1.60	.52	2.12	2.06	8.10	8.00	1.50	9.60	9.00	1.26	1.00
Great Eastern Potato Manure, 1916	1.49	.61	2.10	2.06	10.30	10.00	1.40	11.70	11.00	1.26	1.00
Great Eastern Top Dressing, 1916	2.52	1.60	4.12	4.11	8.00	8.00	2.40	10.40	8.00	1.32	1.00
Crocker's Ammoniated Corn Phosphate, 1916	1.46	.47	1.93	2.06	8.00	8.00	1.20	9.20	9.00	1.40	1.00
Crocker's Potato, Hops and Tobacco Fertilizer, 1916	1.47	.70	2.17	2.06	10.00	10.00	1.30	11.30	11.00	1.36	1.00
Crocker's Potato and Tobacco Fertilizer	1.51	.51	2.02	2.06	9.90	10.00	1.60	11.50	11.00	1.40	1.00
Quinnipiac Special Corn Manure without Potash	1.21	.65	1.86	1.65	10.20	10.00	1.40	11.60	11.00	....	....
Quinnipiac Special Potato Fertilizer without Potash	1.12	.74	1.86	1.65	9.90	10.00	1.60	11.50	11.00	....	....
Quinnipiac Special Potato Fertilizer without Potash	1.21	.53	1.74	1.65	10.80	10.00	1.40	12.20	11.00	....	....
Special Soluble Pacific Guano without Potash, 1916	1.11	.60	1.71	1.65	10.60	10.00	1.90	12.50	11.00	....	....
Special Soluble Pacific Guano without Potash	1.08	.66	1.74	1.65	10.20	10.00	1.40	11.60	11.00	....	....
Pacific Special Potato Fertilier without Potash	.98	.58	1.56	1.65	10.10	10.10	1.60	11.70	11.00	....	....
Williams & Clarke's Special Americus Corn Phosphate without Potash	1.19	.79	1.68	1.65	10.10	10.00	2.30	12.40	11.00	....	....
Williams & Clarke's Special Americus Potato Manure without Potash	1.22	.53	1.75	1.65	10.30	10.00	1.80	12.10	11.00	....	....
ARMOUR FERTILIZER WORKS, Chrome, N. J.											
Armour's Acid Phosphate Fertilizer	....	....	....	....	15.80	16.00	.80	16.60	16.50	....	....
Armour's 2-10, Fertilizer	.35	1.43	1.78	1.65	10.10	10.00	1.70	11.80	10.50	....	....
Armour's Fertilizer, 2-8-2	1.01	.74	1.75	1.66	8.70	8.00	2.40	11.10	8.50	2.18	2.00
Armour's 2-8-2, Grain Grower Fertilizer	.50	1.13	1.63	1.65	7.50	8.00	2.20	9.70	9.00	2.02	2.00
Armour's 4-10, Fertilizer	1.68	1.39	3.07	3.29	10.90	10.00	1.90	12.80	10.50	....	....
Armour's 5-10, Fertilizer	1.50	2.72	4.22	4.11	10.10	10.00	1.10	11.20	10.50	....	....
BOWKER FERTILIZER COMPANY, Boston and New York.											
Bowker's 1-10	.55	.29	.84	.82	10.50	10.00	1.10	11.60	11.00	....	....
Bowker's 1-10, Sure Crop	.62	.32	.94	.82	10.40	10.00	1.40	11.80	11.00	....	....
Bowker's 2-10, Farm and Garden	.93	.72	1.65	1.65	10.20	10.00	1.60	11.80	11.00	....	....
Bowker's 2-10, Farm and Garden	.87	.76	1.63	1.65	10.20	10.00	1.20	11.40	11.00	....	....
Bowker's 3-10, All Round Ground Bone	1.93	.62	2.55	2.47	10.00	10.00	1.80	11.80	11.00	....	....
Bowker's Hill and Drill, 4-10	....	....	2.80	2.47	.....	.....	....	23.20	22.88	....	....
Bowker's Lawn and Garden Dressing	2.55	.77	3.32	3.29	10.00	10.00	2.00	12.00	11.00	....	....
Bowker's Potato Phosphate	2.19	.39	2.58	2.47	7.50	8.00	1.80	9.30	9.00	.98	1.00
Bowker's Potato Phosphate	1.22	.62	1.84	1.65	10.10	10.00	2.30	12.40	11.00	1.24	1.00
Bowker's Soluble Phosphate	1.25	.47	1.72	1.65	10.70	10.00	1.80	12.50	11.00	1.00	1.00
Stockbridge 1916 General Crop Manure	....	....	....	....	15.60	14.00	1.20	16.80	15.00	....	....

Composition of Commercial Fertilizers Sampled and Analyzed in 1918—Continued.

MANUFACTURER AND BRAND.	NITROGEN.				PHOSPHORIC ACID.					POTASH.	
			Total.		Available.			Total.			
	Inorganic.	Organic.	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.	Found.	Guaranteed.	Found.	Guaranteed.
Stockbridge 1916 General Crop Manure	2.12	1.20	3.32	3.29	9.30	9.00	1.40	10.70	10.00	1.24	1.00
Stockbridge 1916 General Crop Manure without Potash	2.31	1.22	3.53	3.29	10.20	10.00	2.60	12.80	11.00	.98	1.00
Stockbridge 5-8, General Crop	2.90	1.01	3.91	4.11	8.30	8.00	2.10	10.40	.....	....	....
Stockbridge 4-9-1	2.34	.94	3.28	3.28	9.10	9.00	2.10	11.20	10.00	1.32	1.00
Stockbridge 5-8	2.96	1.22	4.18	4.11	8.65	8.00	1.90	10.55	9.00	....	....
Stockbridge General Crop Manure	2.52	.76	3.28	3.29	9.50	9.00	1.80	11.30	10.00	1.46	1.00
JOSEPH BRECK & SONS, Boston, Mass.											
Breck's Ram's Head Brand, Pulverizel Sheep Manure	.11	1.38	1.60	....	.70	.....	1.20	1.90	1.50	....	....
Breck's Ram's Head Brand Sheep Manure	....	....	2.01	1.65	.....	.....	....	1.78	1.00	2.44	1.50
BUFFALO FERTILIZER WORKS, New York.											
Buffalo Garden Truck	1.78	1.25	3.03	3.30	10.50	10.00	1.40	11.90	11.00	....	....
Buffalo Farmer's Choice, 1-10-0	.70	.38	1.08	.82	10.30	10.00	2.10	12.40	11.00	....	....
Buffalo Tip Top, 1-8-2	.89	.47	1.16	.80	8.20	8.00	2.00	10.20	9.00	2.02	2.00
Buffalo 1-8-1, General Fertilizer	.57	.40	.97	.82	8.00	8.00	1.90	9.90	9.00	1.28	1.00
Buffalo 2-8-2, Triumph	.98	.72	1.70	1.60	8.30	8.00	1.70	10.00	9.00	1.80	2.00
Buffalo 2-10-0, New England Special	.94	.73	1.67	1.60	10.40	10.00	2.10	12.50	11.00	....	....
Buffalo 3-10, New England Special	1.51	1.05	2.56	2.50	10.00	10.00	2.00	12.00	11.00	....	....
Buffalo 3-10, Vegetable and Potato	1.51	1.04	2.55	2.50	11.30	10.00	2.20	13.50	11.00	....	....
Buffalo Onion, Vegetable and Potato	1.57	1.04	2.61	2.50	10.20	10.00	2.80	13.00	11.00	....	....
Buffalo Sixteen Per Cent	....	....	....	....	16.30	16.00	2.20	18.50	17.00	....	....
Buffalo Top Dressing	3.73	1.77	5.50	5.60	6.30	6.00	2.00	8.30	9.00	....	....
Buffalo Triumph	.91	.83	1.74	1.60	8.20	8.00	2.10	10.30	.....	1.98	2.00

COE-MORTIMER COMPANY. New York City.											
E. Frank Coe's Columbia Corn and Potato Fertilizer....	1.09	.59	1.68	1.23	9.70	10.00	1.50	11.20	11.00	1.64	1.00
E. Frank Coe's High Grade Ammoniated Super Phosphate	1.86	.72	2.58	2.47	10.20	10.00	1.50	11.70	11.00	....	....
E. Frank Coe's Original Dissolved Phosphate	.94	.77	1.71	1.65	10.20	10.00	1.70	11.90	11.00	....	....
E. Frank Coe's Prolific Crop Producer.....	1.98	.57	2.55	3.29	10.20	10.00	1.30	11.50	11.00	....	....
E. Frank Coe's XXX Ammoniated Fertilizer.....	.52	.39	.91	.82	9.30	10.00	1.20	10.50	11.00	....	....
DARLING COMPANY. Chicago, Ill.											
Darling Sheep Manure.....	.28	1.93	2.21	....	.....	.....	1.60	2.00	1.20	2.26	1.20
JOHN E. DOW & CO. Boston, Mass.											
Dow's Ground Tankage	....	....	4.85	5.00	8.40	.....	6.20	14.60	14.00	....	....
ESSEX FERTILIZER COMPANY. Boston, Mass.											
Acid Phosphate	....	....	....	....	14.40	14.00	.90	15.30	15.00	....	....
Essex Fish Fertilizer, 3-10	1.33	1.23	2.56	2.46	10.20	10.00	1.40	11.60	11.00	....	....
Essex 1-12, Grain, Grass and Potatoes.....	.14	.75	.89	.82	12.10	10.00	2.10	14.20	11.00	....	....
Essex 2-8-2	.95	.66	1.61	1.64	8.00	8.00	1.70	9.70	9.00	2.04	2.00
Essex 3-10 XXX, Fish Fertilizer	.57	1.88	2.45	2.46	10.20	10.00	1.20	11.40	11.00	....	....
Essex 3½-10, Market, Garden and Potato Manure.....	1.49	1.07	2.56	2.87	9.00	10.00	2.60	11.60	11.00	....	....
Essex 4-10, Potato Phosphate for Potatoes, Roots and Vegetables	1.54	1.71	3.25	3.26	10.40	10.00	1.60	12.00	11.00	....	....
Essex 4-10, Potato Phosphate for Potatoes, Roots and Vegetables	2.23	1.12	3.35	3.28	10.00	10.00	1.50	11.50	11.00	....	....
Essex 5-8, High Grade	2.02	1.26	3.28	4.10	9.00	8.00	1.50	10.50	9.00	....	....
Essex 6-8, for Potatos, Grass and Lawn.....	3.17	1.50	4.67	4.92	8.00	8.00	1.70	9.70	9.00	....	....
LISTER'S AGRICULTURAL CHEMICAL WORKS, Newark, N. J.											
Lister's Corn and Potato Fertilizer	1.53	.57	2.10	2.06	8.20	8.00	1.70	10.90	9.00	1.40	1.00
Lister's Crescent Ammoniated Super-Phosphate.....	1.15	.64	1.79	1.65	10.70	10.00	1.30	12.00	11.00	....	....
Lister's Excelsior Guano	1.70	.78	2.48	2.47	10.10	10.00	2.10	12.20	11.00	....	....
Lister's High Grade Special for Spring Crop.....	1.51	.56	2.07	2.06	10.10	10.00	1.00	11.10	11.00	2.06	1.00
Lister's Special Potato Fertilizer	.29	3.86	4.15	4.11	10.00	10.00	1.70	11.70	11.00	....	....

Composition of Commercial Fertilizers Sampled and Analyzed in 1918—Continued.

MANUFACTURER AND BRAND.	NITROGEN.				PHOSPHORIC ACID.					POTASH.	
			Total.		Available.			Total.			
	Inorganic.	Organic.	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.	Found.	Guaranteed.	Found.	Guaranteed.
LOWELL FERTILIZER CO., Boston, Mass.											
Lowell Acid Phosphate	....	....	....	....	13.10	16.00	1.40	14.50	17.00	....	....
Lowell 2½-10, Bone Fertilizer for Corn, Grain, Grass and Vegetables	1.47	.56	2.03	2.06	9.70	10.00	3.40	13.10	11.00	....	....
Lowell 1½-10, Empress Brand for Corn, Potatoes and Grain	.39	.49	.88	1.23	9.80	10.00	2.40	12.20	11.00	....	....
Lowell Ground Bone	1.10	1.39	2.49	2.45	.....	.....	....	27.10	20.00	....	....
Lowell 6-30, Ground Tankage	.35	4.34	4.69	5.00	.....	.....	7.60	14.90	.....	....	....
Lowell Sterling 1-12, Phosphate	.34	.50	.84	.82	12.00	12.00	1.70	13.70	13.00	....	....
Lowell 2-8-4	.55	.98	1.53	1.64	8.00	8.00	1.80	9.80	9.00	3.60	4.00
Lowell 2-8 4, N. H. Potato Growers' Association	.52	1.09	1.61	1.64	8.60	8.00	1.20	9.80	9.00	3.70	4.00
Lowell 4-10, Potato Phosphate	1.41	1.55	2.96	3.28	10.30	10.00	1.90	12.20	11.00	....	....
Lowell Potato Manure, 3-10	1.30	1.12	2.42	2.46	10.50	10.00	1.60	12.10	11.00	....	....
Lowell High Grade, 5-8	1.89	2.03	3.92	4.11	9.00	8.00	1.50	10.50	9.00	....	....
MANCHESTER RENDERING CO., Manchester, N. H.											
General Fertilizer for Lawns and Gardens	.67	1.78	2.45	2.46	10.00	7.00	5.00	15.00	15.00	2.04	1.50
Manchester Rendering Co. Fertilizer	.29	4.05	4.34	....	8.70	.....	9.60	18.30	.....	....	....
NATIONAL FERTILIZER CO., New York, N. Y.											
National 14% Plain Super Phosphate	....	....	....	....	14.40	14.00	1.70	16.10	15.00	....	....
National Nitrate Phosphate Mixture	3.50	.73	4.23	4.11	9.80	8.00	2.00	11.80	9.00	....	....

National Tobacco Special without Potash	1.01	3.55	4.56	4.53	5.60	3.00	1.00	6.60	4.00	....	....
National Universalist Grain and Potato Fertilizer	.70	.24	.94	.82	9.10	8.00	1.50	10.60	8.00	1.06	1.00
National XXX, Fish and Potash, 1916	1.60	.52	2.12	2.06	10.20	10.00	1.60	11.80	11.00	1.14	1.00
NATURAL GUANO COMPANY, Aurora, Ill.											
Sheep Head Brand Pulverized Sheep Manure	.42	1.98	2.40	2.25	1.20	1.00	.80	3.00	1.25	2.46	1.00
NEW ENGLAND FERTILIZER CO., Boston, Mass.											
New England 1½-10	1.08	1.22	2.30	1.20	10.00	10.00	3.10	13.10	10.00	....	....
New England 2½-10, for Grain and Vegetables	1.12	.63	1.75	2.06	9.70	10.00	3.40	13.10	11.00	....	....
New England 3-10, Potato Fertilizer	1.23	.97	2.20	2.45	10.20	10.00	1.00	11.20	11.00	....	....
New England 3½-10	.49	.79	1.28	2.87	10.40	10.00	2.50	12.90	11.00	....	....
New England 4-10, High Grade Potato Fertilizer	.95	1.74	2.69	3.28	10.00	10.00	1.60	11.60	11.00	....	....
New England High Grade, 5-8	2.54	.96	3.50	4.00	8.00	8.00	1.80	9.80	9.00	....	....
New England 6-8	2.34	2.20	4.54	4.84	8.20	8.00	2.00	10.20	8.00	....	....
NITRATE AGENCIES COMPANY, New York City.											
High Grade Acid Phosphate	....	....	....	....	16.50	16.00	1.80	18.30	17.00	....	....
N. A. C. Brand, Ground Tankage	.73	5.67	6.40	5.75	7.50	.....	2.80	10.30	.....	....	....
PARMENTER & POLSEY CO., Boston, Mass.											
P. & P. Grain Grower, 1½-10	.25	1.26	1.51	1.23	10.30	10.00	2.30	12.60	11.00	....	....
Plymouth-Rock Brand, 3½-10	.93	1.31	2.24	2.87	9.30	10.00	3.10	12.40	11.00	....	....
PULVERIZED MANURE CO., Chicago, Ill.											
Wizard Brand Manure	.28	1.64	1.92	1.80	1.10	1.00	.70	1.80	.....	2.40	1.00
Wizard Brand Sheep Manure	.08	1.81	1.89	1.80	.....	.....	.60	1.90	.....	2.20	1.00
THE READING FERTILIZER CO., Reading, Pa.											
16% Clear Acid Phosphate	....	....	....	....	16.20	16.00	.90	17.10	17.00	....	....
Farmer's Tankage for Potatoes, Corn, Grain and Grass	.51	.46	.97	.82	10.10	10.00	2.00	12.10	11.00	1.14	1.00

Composition of Commercial Fertilizers Sampled and Analyzed in 1918—Concluded.

MANUFACTURER AND BRAND.	NITROGEN.				PHOSPHORIC ACID.					POTASH.	
			Total.		Available.			Total.			
	Inorganic.	Organic.	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.	Found.	Guaranteed.	Found.	Guaranteed.
Reading All Crop Special	.95	.86	1.81	1.64	10.00	10.00	2.40	12.40	12.40	....	....
Reading Prize Winner	1.65	1.00	2.65	2.46	9.70	8.00	2.00	11.70	10.00	....	....
ROGERS & HUBBARD CO., Portland, Conn.											
Rogers & Hubbard All Round Fertilizer	1.26	.52	1.78	1.65	7.20	7.00	2.00	9.20	7.50	....	....
Rogers & Hubbard All Round Phosphate	1.18	.45	1.63	1.65	7.10	7.00	1.50	8.60	7.50	....	....
Rogers & Hubbard Bone Base Potato Manure	2.24	2.02	4.26	4.25	10.60	10.00	3.30	13.90	13.00	2.08	1.00
Rogers & Hubbard Phosphate	.58	.47	1.05	1.00	7.50	7.50	2.50	10.00	8.00	....	....
Soluble Corn General Crop Manure	1.12	1.29	2.41	2.50	9.90	10.00	4.90	14.80	12.00	....	....
Hubbard's Top Dressing and Oats	4.46	1.06	5.52	6.00	8.00	6.00	4.50	12.50	12.00	....	....
F. O. ROYSTER GUANO CO., Baltimore, Md.											
Royster Perfecto Tobacco Mixture	.95	2.38	3.33	4.11	4.30	4.00	1.70	6.00	4.50	....	....
J. W. SANBORN, Pittsfield, N. H.											
Prof. Sanborn's Chemical Fertilizer for Potato and Corn	2.34	.88	3.22	3.29	10.50	10.00	1.40	11.90	11.00	....	....
YORK CHEMICAL WORKS, York, Pa.											
Dempwoler	....	....	....	....	16.40	16.00	1.10	17.50	.....	....	....

JOHN B. CLARKE CO., PRINTERS MANCHESTER, N. H.